**IT Applications Unit 3, AOS 1, Online Communities**

Complete the following, from Chapter 2, Problem-solving Methodology, pgs, 60-80

**Problem-solving Methodology: 4 Stages**

**Analyse**

**Design**

**Development**

**Evaluate**

**Case Study:**

**Indigenous Language Trust, (ILT)**

Using the case study, ILT complete the following:

**Analysis of the problem**

This stage involves the following three steps:

1. **Determining the solution requirements**
2. What needs to be established?

The things that need to be established is to determine the solution requirement.

1. How is the problem best defined?

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1. The aim of problem analysis is to ensure that the problem is clear enough to effectively analyse it and efficiently solve it. Define these two terms, efficiency and effectiveness.

* Efficiency: Refers to time cost and effort put into producing the solution.
* Effectiveness: Quality, relevancy, timelessly and clarity of information product.

1. What type of organisation is the ILT?

ILT is a non-for-profit group that aims at preserving and developing indegeous language in Australia.

1. In your own words, define the problem for ILT.

The main problem with the ILT is that it would benefit on more people if they made a website for the organisation.

1. Identifying data and information needed for the solution, p 62;
   1. Need to identify where data is coming from for online community – inside or outside
   2. In the ILT case study what is the information needed for the solution?
2. Identifying the functions needed for the online community solution, p 63
   1. The functions needed for online communities can be separated into 2 distinct categories,
      * how the solution functions and
      * attributes of the solution. List the characteristics of each of these.
3. What are the functions of the ILT website solution?
4. **Identify the constraints on the solution, p 64**
   1. List the technical and non-technical constraints.

Technical:

* Cost of solution
* Speed of time taken to access the information
* How secure the solution is
* Number of people access it.

Non-technical:

* Are there issues of privacy when exchanging information
* Are there copyright issues to be considered
* Are there cultural constraints, eg. ILT Case study rules relating to using images of deceased Aboriginals and use of their names on public documents
  1. What are the constraints on the ILT solution?

The constraints on the ILT solution are the culture constraints.

1. **Determine the scope of the solution, p 66**
   1. What needs to be considered in the scope of the solution?

The needs to be considered are:

* Consider benefits of the solution on efficiency and effectiveness within organization.
* Scope clearly outlines what solution can and can’t do
* Provides design stage with guidelines
  1. In the ILT case study list the benefits or the scope of the solution in terms of
     1. Efficiency and
* Time, reduced time to access & exchange information
* Cost, reduced cost as workers in different offices can access information centrally
* Effort, less effort as personnel in each office can build on information they already have rather than having to rediscover it
  + 1. Effectiveness
* improved quality of decision making due to collaborative nature of information exchange
* Relevancy & timeliness, information broadcasted to the public is this
* Completeness, information compiled using collaborative tools by online community will be more complete